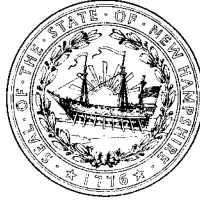


**ATTORNEY GENERAL
DEPARTMENT OF JUSTICE**

33 CAPITOL STREET
CONCORD, NEW HAMPSHIRE 03301-6397

KELLY A. AYOTTE
ATTORNEY GENERAL



ORVILLE B. "BUD" FITCH II
DEPUTY ATTORNEY GENERAL

November 7, 2008

NH DEPT. OF
ENVIRONMENTAL SERVICES

NOV 12 2008

RECEIVED

Thomas S. Burack, Chairman
Site Evaluation Committee
New Hampshire Department of Environmental Services
29 Hazen Drive
Concord, New Hampshire 03301

Re: Application of Granite Reliable Power, LLC
Docket No. 2008-04

Dear Chairman Burack:

Enclosed for filing with the New Hampshire Site Evaluation Committee with reference to the above-captioned matter please find a *Motion of Counsel to the Public for Leave to Retain Dr. George Mariani and Sanford Environmental Services, Inc. as Consultant and for an Order Directing Granite Reliable Power, LLC and Noble Environmental Power, LLC to Bear the Costs Thereof.*

Thank you for your attention to this matter.

Very truly yours,

A handwritten signature in black ink, appearing to read "Peter C.L. Roth".

Peter C.L. Roth
Senior Assistant Attorney General
Environmental Protection Bureau
(603) 271-3679

/cmc
Enclosure
cc: Service List

**THE STATE OF NEW HAMPSHIRE
SITE EVALUATION COMMITTEE**

RE: Application of Granite Reliable
Power, LLC for Certificate of site and
facility to construct up to 99 MW of wind
electric generation in Coos County,
New Hampshire and operate the same

Docket No. 2008-04

**MOTION OF COUNSEL TO THE PUBLIC FOR LEAVE TO RETAIN
DR. GEORGE MARIANI AND SANFORD ENVIRONMENTAL SERVICES,
INC. AS CONSULTANT AND FOR AN ORDER DIRECTING GRANITE
RELIABLE POWER, LLC AND NOBLE ENVIRONMENTAL POWER, LLC
TO BEAR THE COSTS THEREOF**

Counsel for the public, Senior Assistant Attorney General Peter C.L. Roth (“Counsel For the Public”), by his attorneys, the Office of the Attorney General, hereby moves, pursuant to RSA 162-H:10, V, for leave to retain Dr. George Mariani (“Dr. Mariani”) and Sanford Environmental Services, Inc. (“SES”) (Dr. Mariani and SES are together referred to herein after as the “Consultant”), as an expert consultant and for an order directing Granite Reliable Power, LLC (“GRP”) and Noble Environmental Power, LLC (“NEP”), to bear the costs and fees of the Consultant and reimburse Counsel For the Public in an amount up to \$50,000. In support hereof, Counsel For the Public respectfully represents as follows:

1. On July 15, 2008, GRP submitted an application for a certificate.
2. On August 25, 2008, the Attorney General appointed the undersigned as counsel for the public pursuant to RSA 162-H:9.

3. Pursuant to RSA 162-H:10, V, Counsel For the Public may employ such consultants as are necessary to further his duties under ch. 162-H. Also pursuant to RSA 162-H:10, V, the cost of such consultants “shall be borne by the applicant in such amount as may be approved by the Committee.”

4. Counsel For the Public has chosen Dr. Mariani and SES of Southborough, Massachusetts to employ as a consultant. Dr. Mariani’s project team will consist of George Mariani, Ph.D., Gary R. Sanford, Ph.D., Trevor L. Lloyd-Evans, David C. Wilkerson, M.A., and Nicole M. Hayes, PWS. All of these individuals’ qualifications and experience are described in detail in the attached Scope of Services.

5. Dr. Mariani and his team have the necessary experience and training to assess the Project from many different dimensions. Dr. Mariani has extensive experience in ecological impact assessment and permitting and has previously consulted on other energy and road projects. Members of his team are experienced in wetlands, wildlife, ornithology, and habitat evaluation.

6. Dr. Mariani and his team are qualified to, and will advise Counsel For the Public and the Committee with a report on issues concerning impacts on avian and endangered species, wetlands, and habitat impacts associated with the project. Dr. Mariani and SES do not hold or control any interest in the proposed project or any other project of the Applicant.

7. Dr. Mariani’s proposal is to review the application and other materials submitted by the Applicant and its consultants and experts and to prepare a report summarizing their findings and making recommendations for further analysis. Dr.

Mariani and members of his team will visit the Project site, participate in technical sessions and be available for testimony at the hearing on the merits. Dr. Mariani will not, under the proposal, conduct field studies.

8. The Consultant's fees are estimated at \$40,800. Counsel For the Public seeks an order directing the Applicant and NEP to bear costs of up to \$50,000. The Consultant bills on a monthly basis and GRP or NEP shall pay those bills up to the approved budgeted amount as they become due. The Consultant's billing rates and terms are set forth in Scope of Services.

9. Counsel For the Public believes that the independent review of the submissions by the Applicant and its consultants will be of significant value to the Committee in conducting an objective evaluation of this project.

10. Counsel For the Public has conferred with the Applicant and its counsel who have indicated that they support this motion.

Wherefore, Counsel For the Public prays that the Committee enter an order, in the form attached hereto, authorizing the employment of Dr. Mariani and SES as consultant pursuant to RSA 162-H:10, V, and directing the Applicant and NEP to bear the costs, as incurred monthly, up to a total of \$50,000, and granting such other relief as may be just.

Respectfully submitted this 7th day of November, 2008.

PETER C.L. ROTH
COUNSEL TO THE PUBLIC

By his attorneys

KELLY A. AYOTTE
ATTORNEY GENERAL



Peter C.L. Roth
Senior Assistant Attorney General
Environmental Protection Bureau
33 Capitol Street
Concord, New Hampshire 03301-6397
Tel. (603) 271-3679

Certificate of Service

I, Peter C.L. Roth, do hereby certify that I caused the foregoing to be served by first class mail postage prepaid upon each of the parties on the attached Service List.

Dated: November 7, 2008



Peter C.L. Roth

APPLICATION OF GRANITE RELIABLE POWER, LLC

DOCKET NO. 2008-04

Service List

Sub-Committee Members

Thomas Getz, Vice Chairman Site Evaluation Committee NH Public Utilities Commission 21 South Fruit St., Suite 10 Concord, NH 03301 Tom.Getz@puc.nh.gov	Robert Scott, Director Air Resources Division Dept. of Environmental Services 29 Hazen Dr., Box 95 Concord, NH 03302-0095 Robert.Scott@des.nh.gov
Glenn Normandeau, Executive Dir. NH Fish & Game Department 11 Hazen Drive Concord, NH 03301 GLENN.NORMANDEAU@WILDLIFE.NH.GOV	Donald M. Kent, Administrator NH Natural Heritage bureau 172 Pembroke Road, Box 1856 Concord, NH 03302-1856 DONALD.M.KENT@DRED.STATE.NH.US
Michael Harrington, Staff Engineer NH Public Utilities Commission 21 South Fruit St., Suite 10 Concord, NH 03301 michael.harrington@puc.nh.gov	William Janelle, Assistant Director Project Development Department of Transportation PO Box 483 Concord, NH 03302-0483 BJANELLE@DOT.STATE.NH.US
Jack Ruderman, Deputy Director NH Office of Energy and Planning 4 Chenell Drive Concord, NH 03301 JACK.RUDERMAN@NH.GOV	

Committee Members Not on Sub-Committee

<p>Thomas Burack, Chairman Site Evaluation Committee Department of Environmental Services 29 Hazen Drive, Box 95 Concord, NH 03302-0095 Thomas.Burack@des.nh.gov</p>	<p>Harry T. Stewart, Director – Water Division Department of Environmental Services 29 Hazen Drive, Box 95 Concord, NH 03302-0095 Harry.Stewart@des.nh.gov</p>
<p>George Bald, Commissioner Dept. of Resources & Economic Dev. 172 Pembroke Road, Box 1856 Concord, NH 03302-1856 george.bald@dred.state.nh.us</p>	<p>Brook Dupee Department of Health & Human Services Division of Public Health Services 29 Hazen Drive Concord, NH 03301 bdupee@dhhs.state.nh.us</p>
<p>Director Division of Parks & Recreation Dept. of Resources & Economic Dev. 172 Pembroke Road, Box 1856 Concord, NH 03302-1856</p>	<p>Director Division of Forests & Lands Dept. of Resources & Economic Dev. 172 Pembroke Road, Box 1856 Concord, NH 03302-1856</p>
<p>George Campbell, Commissioner NH Department of Transportation 7 Hazen Dr., Box 483 Concord, NH 03302-0483 GCAMPBELLCOMMISSIONER@DOT.STATE.NH.US</p>	<p>Graham Morrison, Commissioner NH Public Utilities Commission 21 South Fruit St., Suite 10 Concord, NH 03301 Graham.Morrison@puc.nh.gov</p>
<p>Clifton Below, Commissioner NH Public Utilities Commission 21 South Fruit St., Suite 10 Concord, NH 03301 Clifton.Below@puc.nh.gov</p>	

<p>Other State Agencies and Officials:</p> <p>Counsel to the Public:</p> <p>Peter C.L. Roth, Esq. Department of Justice 33 Capitol Street Concord, NH 03301 Peter.Roth@doj.nh.gov</p>	<p>Timothy Drew, Administrator Public information & Permitting Dept. of Environmental Services 29 Hazen Dr., Box 95 Concord, NH 03301 Timothy.Drew@des.nh.gov</p>
<p>Michael J. Walls, Asst. Commissioner Dept. of Environmental Services 29 Hazen Dr., Box 95 Concord, NH 03301 Michael.Walls@des.nh.gov</p>	<p>Tara E. Bamford, Planning Director North Country Council, Inc. The Cottage at the Rocks 107 Glessner Road Bethlehem, NH 03574 tbamford@nccouncil.org</p>
<p>Elizabeth H. Muzzey, Director NH Division of Historical Resources 19 Pillsbury St., 2nd Floor Concord, NH 03301-3570 elizabeth.muzzey@dcr.nh.gov</p>	<p>Richard A. Roach US Army Corps of Engineers New England District 969 Virginia Road Concord, MA 01742-2751 Richard.A.Roach@usace.army.mil</p>
<p>Louise Cote, Clerk Millsfield (Unincorporated Place)] 25 Main Street, Box 190 Errol, NH 03579</p>	<p>Richard C. Erwin, Clerk Dixville (Unincorporated Place) 1000 Cold Spring Road Dixville, NH 03576</p>
<p>A Bradford Wyman, Chair Dummer Board of Selectmen 75 Hill Road Dummer, NH 03588</p>	<p>Patricia S. Stinson, Clerk Odell (Unincorporated Place) PO Box 366 Stratford, NH 03579</p>
<p>Coos County Commissioners' Office Po Box 10 West Stewartstown, NH 03597</p>	

Committee Staff:	
Jane Murray, Exec. Sec. Dept. of Environmental Services 29 Hazen Dr., Box 95 Concord, NH 03301 jane.murray@des.nh.gov	Michael J. Iacopino Brennan Caron Lenehan & Iacopino 85 Brook Street Manchester, NH 03104 miacopino@bclilaw.com
Counsel to the Applicant:	
Douglas L. Patch, Esquire Orr & Reno One Eagle Sq., Box 3550 Concord, NH 03301 DPatch@Orr-Reno.com	Susan Geiger, Esquire Orr & Reno One Eagle Sq., Box 3550 Concord, NH 03301 Sgeiger@Orr-Reno.com

INFORMATION ONLY:	
Chris Jensen NH Public Radio Bethlehem, NH 03574 Chris416jensen@aol.com	Jonathan S. Frizzell PO Box 137 Colebrook, NH 03576-0137 jon@waystackfrizzell.com

Intervenors: Lisa Linowes 286 Parker Hill Road Lyman, NH 03585 llinowes@windaction.org For: Industrial Wind Action Group	Farrell S. Seiler, Chairman NH Wind Energy Assoc. 134 Main St., Box 693 Littleton, NH 03561 windinfo@charter.net
David Publicover, Sr. Staff Scientist Appalachian Mountain Club Po Box 298 Gorham, NH 03581 dpublicover@outdoors.org	Bill Gabler Clean Power Development 130 Pembroke Road, Suite 100 Concord, NH 03301 bill@cleanpowerdevelopment.us
Kathlyn J. Keene 22 North Road PO box 163 Jefferson, NH 03583 mollydog@ncia.net	Jeff Meyers, Esquire Nelson Kinder Mousseau & Saturley 99 Middle Street Manchester, NH 03101 jmeyers@nkms.com For: Clean Power Development
Robert A. Keene 22 North Road PO Box 163 Jefferson, NH 03583 rkeene@centralpaper.com	Jon Odell 128 Middle Street Lancaster, NH 03584 jodell@verizon.net
Wayne R. Urso PO Box 90 Errol, NH 03579 Wayne@TheUrsos.com	Sonya M. Sheldon PO Box 11 Colebrook, NH 03576 apeace@localnet.com

**THE STATE OF NEW HAMPSHIRE
SITE EVALUATION COMMITTEE**

RE: Application of Granite Reliable
Power, LLC for Certificate of site and
facility to construct up to 99 MW of wind
electric generation in Coos County,
New Hampshire and operate the same

Docket No. 2008-04

**ORDER GRANTING MOTION OF COUNSEL TO THE PUBLIC FOR
LEAVE TO RETAIN GEORGE MARIANI, Ph.D. AND SANFORD
ENVIRONMNETAL SERVICES, INC. AS CONSULTANT AND FOR AN
ORDER DIRECTING GRANITE RELIABLE POWER, LLC AND NOBEL
ENVIRONMENTAL POWER, LLC. TO BEAR THE COSTS THEREOF**

It having come before the duly appointed Sub-committee of the Site Evaluation Committee upon the Motion of Counsel For the Public for Leave to Retain George Mariani, Ph.D. and Sanford Environmental Services, Inc. as Consultant and For an Order Directing Granite Reliable Power, LLC ("Granite") and Nobel Environmental Power, LLC ("Nobel") to Bear the Costs Thereof (the "Motion"), there being a quorum of the Committee present and voting, after hearing, and with the assent of Granite and Nobel, the Committee hereby **Orders** as follows:

- 1. The Motion is granted;**
- 2. Counsel For the Public is hereby authorized, pursuant to RSA 162-H:10, V, to employ George Mariani, Ph.D. and Sanford Environmental Services, as consultant ("Sanford"), in accordance with the terms of its Scope of Services (the "Scope of Services"); and**
- 3. Pursuant to RSA 162-H:10, V, Granite and Nobel are hereby directed to bear the costs incurred by counsel to the public in his employment of Sanford, and shall reimburse, indemnify and hold harmless Counsel For the Public for such costs upon presentation of Sanford's invoices, up to the amount of \$50,000 in accordance with the terms set forth in the Scope of Services, by delivering checks in payment of Sanford's invoices to Counsel For the Public written to Sanford.**

By **ORDER** of the Site Evaluation Committee this ___ day of November, 2008.

Thomas Getz, Vice Chairman
New Hampshire Site Evaluation Committee



SANFORD ENVIRONMENTAL SERVICES, Inc.
Environmental Consultants

ATTACHMENT A
SCOPE OF SERVICES
(GRANITE RELIABLE POWER WINDPARK)

Task 1. Site Inspection: SES will conduct an inspection of the proposed project site with a representative of Granite Reliable Power to view the proposed locations of the wind turbines, the proposed substation/maintenance/laydown area as well as the proposed roadway (new and upgraded) areas.

Costs:

Labor: Principal Scientist: 12 hours @ \$165/hr.-----	\$ 1980.00
Chief Scientist: 12 hours @ \$115/hr.-----	\$ 1380.00
Mileage/M&S:-----	\$ 300.00
TOTAL TASK 1.	---\$3,660.00

Task 2. Environmental Impact and Permitting Analysis: SES will review the information submitted by the project proponent regarding the project's anticipated environmental impacts. In addition, SES will advise the Attorney General on the project's consistency with applicable State and Federal environmental regulations. Review of the project's potential environmental impacts will include issues related to direct and indirect impacts to wildlife (avian, rare and endangered species, habitat), wetlands, rare plant species and aesthetics of the environment (visual impact, shadow flicker). Other than visual site inspection of the proposed project area, SES does not propose to conduct its own field studies. SES will advise the Attorney General of our findings and recommendations in a written report.

Costs:

Labor: Principal Scientist: 40 hours @ \$165/hr.-----	\$ 6600.00
Chief Scientist: 80 hours @ \$115/hr.-----	\$ 9200.00
Senior Scientist: 80 hours @ \$ 84/hr.-----	\$ 6720.00
Mileage/M&S:-----	\$ 500.00
TOTAL TASK 2. -	--\$23,020.00

Task 3. Attendance at Meetings (At Client's Request – Budget for five meetings)

Costs:

Labor: Principal Scientist: 30 hours @ \$165/hr.-----	\$4950.00
Mileage/M&S:-----	\$ 625.00
TOTAL TASK 3. -	--\$5575.00

Task 4. Attendance at Hearings and Provide Testimony (At Client's Request – Budget includes 5 days of hearings)

Costs:

Labor: Principal Scientist: 48 hours @ 165/hr.-----	\$7920.00
Mileage/M&S:-----	\$ 625.00
TOTAL TASK 4.	--\$8545.00



SANFORD ENVIRONMENTAL SERVICES, Inc.

Environmental Consultants

RESUME

PRINCIPAL

GEORGE M. MARIANI, Ph.D.

QUALIFICATIONS

Twenty-five years of experience in the development, implementation and management of environmental programs.
Competence includes:

- Program Management
- Report Preparation
- Wetland Resource Assessment and Mitigation
- Wildlife Assessment and Mitigation
- Environmental Impact Assessments
- Water Quality Assessment
- Environmental Chemistry
- Surface and Groundwater Assessment
- Facility Siting Evaluation
- Expert Testimony
- Third Party Instructor

EDUCATION

Ph.D. (Environmental Sciences) University of Texas, Dallas

M.S. (Plant and Soil Sciences - Environmental Microbiology) University of Massachusetts, Amherst

B.S. (Biology) Boston College, Massachusetts

SALIENT PROFESSIONAL ACHIEVEMENTS

-Supervised and conducted the design and implementation of wetland and wildlife habitat assessments and habitat construction/restoration projects throughout New England.

-Supervised and conducted Environmental Site Assessments work to investigate and remediate sites for commercial and government agencies.

-Managed and implemented numerous multidisciplinary environmental programs related to facility siting, resource evaluation, impact assessment, and mitigation of wetland and wildlife resources.

-Third Party Instructor: Conducted training programs on Right-To-Know Law. Supervised and implemented training programs on the safe handling and disposal of hazardous substances.

-Supervised and conducted Environmental Assessments of Navigation Projects and Flood Control Projects throughout New England.

-Prepared numerous technical reports and publications regarding environmental fate and effects of various activities within terrestrial and aquatic environments.

-Participated in the preparation of permit support documents including NPDES, Chapter 91 (state), Section 10/404 (Corps of Engineers), Chapter 131 (state wetlands), Chapter 310 (state drinking water and hazardous waste) and RCRA.

-Evaluated and developed remedial alternatives for contaminated sediments (DDT, DDE and DDD) present in a wildlife refuge located in Alabama. Report, which (1) evaluated data base; (2) identified fundamental considerations; and (3) presented criteria for selecting clean-up alternatives, was prepared.

-Developed and implemented surface-water and groundwater investigations for sites in Massachusetts and New York. Remedial action plans developed for contaminated sites.

-Provided expert testimony on behalf of clients regarding fate and effects of contamination and remedial action.

-Provided expert testimony on behalf of clients regarding wetland resources and their functions.

-Supervised and conducted bioaccumulation assessment for PCB contaminated estuary in New Bedford, Massachusetts.

-Developed and implemented wildlife assessment and remedial action program for PCB contaminated site in New Bedford, Massachusetts. Supervised containment and capping program and surface-water and groundwater sampling programs.

-Developed dredged material disposal criteria for the U.S. Army Corps of Engineers and the Government of Australia. Supervised the evaluation of environmental impacts related to dredged material disposal projects at over 40 sites across the United States.

EXPERIENCE

- 1984-Present Principal, Sanford Environmental Services. Responsible for managing and supervising projects, and providing environmental consulting services related to resource evaluation, impact assessment, mitigation, surface-water and groundwater contamination, facility siting and waste disposal.
- 1983-1984 GMA Environmental Consultants. Responsible for providing environmental consulting services related to resource assessments, surface-water and groundwater contamination, facility siting and waste disposal.
- 1978-1983 Principal Scientist/ Program Manager, EG&G Environmental Consultants. Responsible for designing, implementing and managing studies related to the fate and effects of chemical contamination, and impacts of energy-related activities and waste disposal. Directly responsible for supervising site investigations, designing surface-water and groundwater monitoring programs and developing remedial action programs.
- 1976-1978 Environmental Scientist, Enviro-Qual Consultants. Responsible for evaluating impacts of waste disposal on aquatic environments.
- 1976-1977 Research Associate, Institute for Environmental Studies at the University of Texas, Dallas. Responsible for evaluating impacts of dredged material disposal and developing dredged material disposal criteria.

PROFESSIONAL SOCIETIES AND CERTIFICATION

American Society of Testing Materials (ASTM)
National Association of Wetland Managers
DEQE Certification to Conduct Wetland Delineations along Railroad Rights-of-Way
Licensed to Conduct Third Party Right-to-Know Training



SANFORD ENVIRONMENTAL SERVICES, Inc.

Environmental Consultants

RESUME

CHIEF SCIENTIST

GARY R. SANFORD, Ph.D.

QUALIFICATIONS

Twenty-five years of experience in the initiation, development and management of environmental programs.

Competence includes:

- Program Management
- Ecological Research
- Regulatory Constraint Analysis
- Wetland Mapping
- Site Evaluations
- Environmental Impact Assessments
- Report Preparation
- Permitting
- Expert Testimony
- Wildlife Analysis

EDUCATION

- Ph.D. (Ecology - Botany) University of California, Davis
M.A. (Biological Sciences) Chico State College, California
B.A. (Botany) University of California, Berkeley

SALIENT PROFESSIONAL ACHIEVEMENTS

-Member of Massachusetts Department of Environmental Protection (DEP) subcommittee to establish methodology guidelines for the identification of wetland boundaries

-Supervised the design and implementation of court ordered 200 acre wetland construction/restoration project in southeastern Massachusetts

-Appointed to the Massachusetts Department of Environmental Quality Engineering (DEQE) scientific subcommittee for the purpose of advising and aiding DEQE in developing new wildlife habitat protection regulations.

-Assessed environmental impacts associated with the Schrafft Center, Charlestown, Massachusetts. Project would result in limited filling in Boston Harbor. Project granted Section 10 and Section 404 permit.

-Assisted the U.S. Army Corps of Engineers' Enforcement Division by testifying on a replication program for 200 acres of lost wetlands.

-Evaluated salt marsh in the upper New Bedford Harbor for the U.S. Army Corps of Engineers and U.S. Environmental Protection Agency. Assessment emphasized potential PCB related impacts.

- Testified in adjudicatory hearings, in land court, and in U.S. District Court.
- Coordinated and assisted in management of the New England Energy Park coal gasification environmental program. Responsible for proposals, budgets, task designs, scheduling, subcontracting, labor and hiring. Program budgeted at \$1.7 million.
- Conducted environmental studies to locate a corridor for rail, vehicles and pipelines to provide access to the New England Energy Park. A report was issued to state agencies. An easement for the corridor through a state forest was granted by unanimous vote of the Massachusetts legislature.
- Conducted a wildlife impact study for the Army Corps of Engineers. Utilized Habitat Evaluation Procedures (HEP) to identify potential impacts and developed mitigation strategies for the Hodges Village (Massachusetts) Low-Flow Augmentation Project.
- Conducted terrestrial ecology and wetland studies on 4600- acre parcel of land in Fall River, Massachusetts. Wetland and vegetation maps were prepared, wildlife surveyed and habitats ranked based on ecological criteria.
- Assessed environmental impacts of the New England Energy Park coal gasification project. Prepared wetland permit support document. Participated in the preparation of other permit support documents Including PSD, NPDES, Section 10/404 (Corps of Engineers), Chapter 91 Waterways (state), New Source Review (state air and noise permit), solid waste site assignment (local), archaeology review (state) and various safety permits.
- Testified at public hearings for wetland Order of Conditions. Presented technical information at federal environmental scoping session. Made presentations at various public hearings. Represented clients to newspaper and television reporters.
- Conducted feasibility study dealing with the utilization of cold lake water for air conditioning. Made environmental impact assessments and contributed design specifications to reduce impacts. Project implemented and energy cost savings of \$175,000 per year are being realized.
- Conducted applied research on the effects of paper mill effluent on aquatic mosses demonstrating insignificant impact from effluent. Mill was relieved of responsibility of increased expenditures on treatment facilities.

EXPERIENCE

1983-Present Principal, Sanford Environmental Services. Environmental consulting services.

1980-1983 Senior Scientist/ Deputy Director, EG&G Environmental Consultants. Project management, proposal and budget preparation, terrestrial ecology/wetland duties. Trained in Habitat Evaluation Procedures (HEP - U.S. Fish and Wildlife Service impact assessment tool).

1978-1981 Wellesley College Greenhouses and Botanic Gardens. Responsible for proper maintenance and operation of facilities, preparing budgets, administering funds, developing educational programs, interviewing job applications and supervising employees.

1974-1981 Assistant Professor, Biological Sciences, Wellesley College. Courses in ecology, advanced ecology, horticultural science, nonvascular plants and introductory biology. Coordinator for courses in ecology and horticultural science. Designed field exercises in terrestrial, aquatic and marine environments.

Research Positions. Managed research projects for the past twenty years. Projects have dealt with deserts, lakes, streams, rivers and canals:

Research Scientist, Wellesley College, Massachusetts, 1974-1981.

Research Scientist, University of California, 1971-1974.

Research Scientist, University of California, 1967-1968.

Member of Wetlands Protection Committee, Town of Wellesley, Massachusetts, 1980-1981.

PROFESSIONAL SOCIETIES AND CERTIFICATION

U.S. Fish and Wildlife Service, Certified in Habitat Evaluation Procedures

Society of Wetland Scientists

Sigma Xi



SANFORD ENVIRONMENTAL SERVICES, Inc.

Environmental Consultants

RESUME

WETLAND/WILDLIFE SCIENTIST: DAVID C. WILKERSON, M.A.

QUALIFICATIONS

13 years experience in wetland and wildlife assessments, ecological landscape design, permitting, land planning and GIS analysis

Competence includes:

- Wetland and Wildlife Assessments
- Rare Species Evaluations
- Wetland Delineation
- Site Evaluation and Planning
- Planting plans for restored and constructed wetlands
- GIS analysis and map preparation
- Report preparation

EDUCATION

M.A. (Landscape Architecture and Planning) Conway School of Landscape Design, Massachusetts

Graduate Studies (Ecology and Zoology) University of Colorado, Boulder

B.A. Magna Cum Laude (Biology) New England College, New Hampshire

SALIENT PROFESSIONAL ACHIEVEMENTS

- Conducted numerous wetland and wildlife evaluations throughout Massachusetts in support of permit applications.
- Designed and prepared construction documents for restoration of 26-acre gravel pit, using native plant species and compost
- Prepared planting plans for wetland restoration along 30-mile water main right-of-way
- Prepared permits for dredging old, eutrophic farm pond to restore wildlife habitat
- Helped design and manage construction for innovative storm water management system using bio-swales, rain gardens, and constructed wetlands
- Designed and implemented GIS system for large Massachusetts Audubon sanctuary
- Helped prepare wetland permits for numerous water and wastewater projects for Massachusetts municipalities
- Gathered data over the past 6 years for ongoing analysis of grey wolf behavior and ecology in Yellowstone National Park

- Prepared GIS analysis and documents included in Comprehensive Wastewater Management Plans for several municipalities in the Assabet Consortium, Massachusetts

EXPERIENCE

2005-Present Wetland Scientist, Sanford Environmental Services, Inc. Environmental consulting services

2003 Senior Civil Designer, GeoSyntec Consultants, Inc. Storm water management solutions

1996-2003 Land Planner, Earth Tech, Inc. Environmental and engineering consultants



SANFORD ENVIRONMENTAL SERVICES, Inc.

Environmental Consultants

RESUME

WETLANDS & WILDLIFE BIOLOGIST/ NICOLE M. HAYES, B.S, PWS

QUALIFICATIONS

Twelve years experience in Wetland, Rare Species, and Botanical science. Field work and competence in the following areas:

- Wetland & Riverfront Delineations
- Wildlife Habitat Evaluation
- Rare Wildlife Analysis and Preservation
- Vernal Pool Evaluation
- Wetland Replication and Vegetation Management Plans
- Environmental Impact Assessment and Mitigation
- Notice of Intent Preparation
- 401 Individual Water Quality Certification Application Preparations
- 404 Individual Permit Application Preparations

EDUCATION and CERTIFICATIONS

B.S. (Environmental Biology with a Minor in Analytical Chemistry) Roger Williams University, Bristol, Rhode Island.
MACC Soils Science Coursework
Society of Wetland Scientists Amphibians and Reptiles Life History Classes
Certified MA Audubon Wildlife Instructor
Professional Wetland Scientist Certification
Massachusetts Certified Horticulturalist Certification

SALIENT PROFESSIONAL ACHIEVEMENTS

- Conducted wildlife habitat evaluations and prepared habitat mitigation plans for projects to meet Federal, State, and Local regulations.
- Conducted Wetland Resource Evaluations and Wetland Replacement Specifications for various projects to meet Federal, State, and Local regulations.
- Participated in research on comparative population study of Rhode Island amphibians between 1974 and 1994.
- Conducted a study relating to net oxygen production of fresh water *Ludwigia* and *Myriophyllum* species.

EXPERIENCE

2000-Present Professional Wetland Scientist, Sanford Environmental Services, Inc.
Responsible for wetland boundary delineation, wildlife habitat evaluations,

wetland replication specifications, and the preparations of Notices of Intent, and federal and state permit applications.

- 1996-2000 Weston Nurseries, Botanical Scientist and Regional Manager. Responsible for care and maintenance of nursery stock. Manager of retail and wholesale departments.
- 1994-1996 Certified Wildlife Instructor and Volunteer Herpetological Research Scientist for MA Audubon Society and Environmental Chemist, Matrix Environmental Laboratories. Responsible for sampling and analysis of water and soils.
- 1993-1994 Wildlife Assistant, Norcross Wildlife Conservatory. Responsible for species identification and preservation of endangered species. Botanical maintenance of wetland and forest communities.

MEMBERSHIP IN PROFESSIONAL SOCIETIES

Massachusetts Audubon Society
Society of Wetland Scientists
Massachusetts Association of Conservation Commissions



SANFORD ENVIRONMENTAL SERVICES, Inc.

Environmental Consultants

RESUME

CHIEF SCIENTIST – ORNITHOLOGIST

TREVOR L. LLOYD-EVANS

Manomet Center for Conservation Sciences (MCCS), 81 Stage Point Road, Manomet, Massachusetts 02345-1770; Phone: (508) 224-6521; Fax: (508) 224-9220;
E-mail: tlloyd-evans@manomet.org. Birthplace: Oxford, England. Birth date: 5/24/46.
Citizenship: U.S.A. & British.

EDUCATION:

B.Sc. Honours 1965-1968 (Zoology), University of Wales (Swansea College/*Coleg y prifysgol, Abertawe*)), Wales; Course work, qualifying and oral exams passed, Ph.D. not completed 1985-1992 (Ecology), Boston University, Boston, Massachusetts.

EMPLOYMENT:

British Trust for Ornithology: Ornithologist, Bird Ringing and Migration office (1968-1969), Project Officer, Ornithological Hazards to Low Flying Aircraft (1969-1971). Manomet Center for Conservation Sciences: Senior Staff Biologist (1972-present), Conservation research and education in: avian migration, breeding ecology, physiology, taxonomy, evolution and conservation biology. Bird census and banding techniques, habitat evaluation, wetland impact studies. Field experience in U.S.A. (incl. Alaska), Belize, British Isles, Canada, Eire, Nigeria, Portugal and Spain.

TEACHING EXPERIENCE:

Teacher MCCS (1972-present) field biology techniques, analysis, behavioral ecology, conservation biology, taxonomy and evolution to a wide range of students (school, undergraduate, graduate, adult education). Faculty, Field Biology Training Program MCCS (1986-1997) teaching in Massachusetts and Belize, granting up to full semester credits through a consortium of U.S. Colleges.

HONORARY POSITIONS:

Nuttall Ornithological Club, Cambridge, MA, Council, Vice-President, President (1977-1984); Partners in Flight, Committee Member N.E. Region (U.S.) and/or Commonwealth of Mass. (1995-present); Massachusetts Avian Records Committee, Member, Chair (1996-2003); North American (Bird) Banding Council, Committee, Trainer (1998-present).

SELECTED PUBLICATIONS AND REPORTS:

Miller-Rushing, A. J., T. L. Lloyd-Evans, R. B. Primack and P. Satzinger. 2008. Bird migration times, climate change and changing population sizes. *Global Change Biology* 14 (9) 1959-1972.

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Additional co-authors: R. J. Dowsett (Zambia), J. S. Elkinton (University of Massachusetts), I. J. Ferguson-Lees (British Ornithologists Union), J. J. M. Flegg (British Trust for Ornithology), C. H. Fry (University of Aberdeen), R. E. Sharland (Nigeria).

Selected Conference Papers:

Lloyd-Evans, T.L. 2007. Avian Influenza: An Overview from the Manomet Center for Conservation Sciences. The New England Chapter of the Wildlife Society: Wildlife Diseases Conference. Turners Falls, Massachusetts.

Litwin, T.S., T.L. Lloyd-Evans and K.A. Halvorsen. 2007. Stopover Habitat Use by Neotropical Spring Migrant Landbirds in the Connecticut River Valley. Wilson Ornithological Society, Boston, Massachusetts.

Lloyd-Evans, T.L. 2005. Population Trends in Migrant Passerine Birds of the Northeast. Vermont-New Hampshire Birders Conference, Vermont Institute of Natural Science & New Hampshire Audubon Society, Lake Morey, Fairlee, Vermont.

Lloyd-Evans, T. L. 2005. Passerine Migration in New England: Habitat Selection and Changes in Numbers of Migrant Songbirds. Connecticut Ornithological Association, Middletown, Connecticut.

Miller-Rushing, A. J., T. L. Lloyd-Evans, R. B. Primack. 2005. Changes in Bird Migration Times in Eastern North America. The Ecological Society of America, Montreal, Canada.

Hagan, J. M., T. L. Lloyd-Evans, J. L. Atwood and D. W. Wood. 1989. Detecting Population Changes using Migration Count Data: A Comparative Approach. Ecology and Conservation of Neotropical Migrant Landbirds, Woods Hole, Massachusetts.

Atwood, J. L. and T. L. Lloyd-Evans. 1989. Common Yellowthroat (*Geothlypis trichas*) Spring Migration in Coastal Massachusetts: a Geographic Analysis. Ecology and Conservation of Neotropical Migrant Landbirds, Woods Hole, Massachusetts.

Lloyd-Evans, T. L., J. L. Atwood and J. M. Hagan. 1988. Intraspecific variation in the timing of warbler migration in eastern Massachusetts. American Ornithologists Union, Fayetteville, Arkansas.

Brokaw, N. V. L. and T. L. Lloyd-Evans. 1988. Distribution, abundance and site fidelity of nearctic migrants in five vegetational types in Belize. American Ornithologists Union, Fayetteville, Arkansas.

Lloyd-Evans, T. L. 1982. Long Term Fluctuations in Migratory Populations of Birds Associated with Eastern Spruce Budworm. 6th Annual Eastern Spruce Budworm Research Work Conference. Bangor, Maine.

Lloyd-Evans, T. L. 1980. Timing of Molt in Passerine Birds from North Point, James Bay, Ontario. American Ornithologists' Union. Fort Collins, Colorado.

STATEMENT OF CAPABILITIES

2008

30 Turnpike Road
Southborough, MA 01772
Telephone: (508) 460-9900
Facsimile: (508) 481-2009



SANFORD ENVIRONMENTAL SERVICES
Environmental Consultants

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CAPABILITY STATEMENT

THE FIRM

Sanford Environmental Services, Inc. (SES), which was founded in 1984 by Dr. Gary R. Sanford and Dr. George M. Mariani, is an environmental consulting firm based in Southborough, Massachusetts. The firm conducts investigations designed to identify potential environmental impacts and to resolve environmental issues.

SES serves the private sectors (including the commercial, industrial, and legal industries) and governmental sectors (federal, state, and municipal agencies). The firm utilizes highly qualified scientists and engineers capable of supporting and explaining their findings in various forums ranging from the client's office to public meetings and courtroom testimony.

The firm engages in most types of environmental work, including environmental resource identification and evaluation, environmental assessments, hydro-geological investigations, regulatory compliance analysis, project planning, impact assessment, permit applications and support documentation, and support services during and after project implementation. Its client list includes corporations, real estate development firms, architectural and engineering firms, regulatory agencies, environmental consulting firms, and individual homeowners.

SES has designed, managed and conducted both large and small projects which have varied in complexity from simple single-issue land use questions to multi-facet resource assessments requiring inter-agency review. The ability to effectively conduct the latter type of project has given SES the reputation of providing its clients the highest quality of technical services and placed it in a leadership role in coordinating and managing the activities of other specialized firms.

The company has developed specialized computer based programs, cost-tracking and critical path identification capabilities to ensure that project deadlines and budgets are met. It maintains a professional staff that is comprised of highly qualified individuals all, of which have training and

degrees in their respective fields. Responsibility for the daily management of a project is normally assigned to a project manager/staff scientist who reports directly to the client. Thus, the project manager is SES's spokesman and is responsible for maintaining proper communication with the client.

In addition to its in-house staff, SES utilizes a number of outside specialists located in the New England area. Close associations are maintained with a variety of experts located at colleges, universities, architectural and engineering firms, and other consulting firms. Several benefits can be identified as a result of this structure: (1) the client is getting the services of the most highly qualified people; (2) the specialist's expertise is focused on the needs of the client; and (3) the client's dollars are used to solve their problems and not to support an elaborate infrastructure common to many other consulting firms.

APPROACH

Each project is considered unique, and the first order of business is to understand the objectives of the client. Once the objectives are clearly defined and understood, information is gathered and options to solve the issue(s) are presented. SES explains the risks and benefits of each option in a way that allows the client to choose the best solution. SES can then implement the decision in a manner tailored to the client's best interest.

To assure the highest level of work, SES has developed an internal review process that ensures that each report produced by the firm is of the highest technical quality. Staff scientists prepare all draft reports that are subjected to critical peer review for editing prior to submission to the client.

PROJECT EXPERIENCE

SES has had extensive experience with ecological impact assessment. The firm can:

- prepare environmental impact reports
- conduct field and/or laboratory research to address environmental resource and impact questions

- **conduct and prepare Environmental Assessments, 404(b)(1) evaluations, Statements of Compliance and Findings of Impacts**
- **prepare specialized reports on resources or specific environmental issues**
- **review draft and final environmental documents**
- **render expert opinions**
- **provide biological, chemical, geological, hydrogeological and/or technical support for field studies**
- **perform computer modeling to determine existing environmental conditions and potential environmental impacts**

Further, SES personnel have been involved in numerous multi-disciplined programs in the New England area. Examples of project experience given below, much of it involving environmental assessment, impact analysis, and mitigation design, are intended to represent the range of areas for environmental work that has been conducted by the company.

- **Environmental Impact Report preparation for various development projects in New England (including hydrogeologic, surface drainage, wetland, wildlife habitats, fisheries, marine and freshwater habitats, water quality, sewage disposal, water supply, and traffic evaluations)**
- **Regulatory Compliance Analysis**
- **Wetlands, terrestrial, and water quality impacts associated with proposed shopping malls in New England**
- **Environmental Impact Assessments for commercial, industrial, and residential projects**
- **Terrestrial and aquatic impacts associated with waste disposal and development of remedial actions**
- **Terrestrial, aquatic, and atmospheric impacts associated with energy and transportation related projects**
- **Hydrogeological modeling and groundwater impact assessment**
- **Road and railroad alignment assessments**
- **Hazardous material site assessments**
- **Habitat replication**
- **Dredged material disposal impacts**
- **Coastal resource inventories and assessments**
- **Assessment of aquifer zones of contribution around town wells in Massachusetts**
- **Evaluation of wetland hydrology at numerous sites in New England;**
- **Assessment of proposed discharge of secondary waste water effluent to ground water in Middleboro, Massachusetts**

- **Evaluation of effects on local ground water regime and wetland hydrology from proposed excavation and construction at various sites throughout New England**
- **Installation of wells and monitoring of water levels to determine the movement of ground water**
- **Expert testimony and evaluation of wetland hydrology regarding Federal court order to restore over 100 acres of wetland in Middleboro, Massachusetts**
- **Evaluation of soil characteristics for the disposal of septage at various sites in Massachusetts**
- **Wildlife (HEP) analysis for the Army Corps of Engineers, New England Division**
- **Wildlife impact evaluations required by the Massachusetts Wetlands Protection Act**

ENVIRONMENTAL IMPACT ASSESSMENT CAPABILITY

- **ISSUE DEFINITION** (wetlands, water quality ground water, water supply, storm water management, traffic, air quality, etc.)
- **EXISTING CONDITIONS ANALYSES**
- **PROPOSED CONDITIONS ANALYSES**
- **MITIGATION PROPOSALS**
- **IMPACT ASSESSMENT**
- **FEASIBILITY ANALYSIS**
- **ENVIRONMENTAL RISK ASSESSMENT**
- **REPORT PREPARATION** (environmental impact reports/statements, impact assessments, permit documentation)

WETLANDS CAPABILITY

- **RESOURCE IDENTIFICATION** (wetland border identification, wetland mapping, species identification, soils evaluation, hydrologic assessments, quantitative documentation)
- **RESOURCE EVALUATION** (resource types, ecosystem functions, public and private water supply, groundwater supply, flood control, storm damage prevention, prevention of pollution, protection of fisheries, protection of land containing shellfish, protection of wildlife habitat, federal functional analyses)
- **PROJECT PLANNING** (performance standards, mitigation, best management plans, trade-off analyses, functional analyses)
- **PERMITTING** (applications preparation, support documentation, hearing presentations, expert testimony)
- **PROJECT IMPLEMENTATION** (erosion and sedimentation control, wetland replacement, wetland restoration, wetland enhancement, revegetation)

WETLAND HYDROLOGY CAPABILITY

- **RESOURCE INVESTIGATIONS** (Water budget analysis, hydrologic significance, flood control functions, ground water supply functions, prevention of pollution, storm damage control)
- **PROJECT PLANNING** (performance standards, best management plans, mitigation, trade-off analysis)
- **PERMITTING** (impact analysis, report preparation, hearing presentations, expert testimony)
- **PROJECT IMPLEMENTATION** (wetland replacement, wetland construction, wetland improvement, wetland restoration)

VERNAL POOL CAPABILITY

- **RESOURCE IDENTIFICATION** (vernal pool identification, mapping, species identification, hydrologic assessments, certification documentation)
- **RESOURCE EVALUATION** (species life requisites, resource availability, sampling protocol, data collection, impact assessment, hydrology)
- **PROJECT PLANNING** (performance standards, mitigation, functional analyses, water budget analyses)
- **PERMITTING** (application preparation, support documentation, hearing presentations, expert testimony)
- **PROJECT IMPLEMENTATION** (erosion and sedimentation control, vernal pool enhancement, vernal pool construction)

WATER QUALITY CAPABILITY

- **RESOURCE INVENTORY** (surface and ground water drinking supplies, aesthetics, active and passive recreation, and fisheries and wildlife habitat)
- **RESOURCE EVALUATION** (water quality, eutrophication, coliform bacteria, public health, biological monitoring, assimilative capacity, domestic and industrial wastewater analyses, pollution assessment, nutrient budgets, aquatic weeds, algae assessment, modeling, fate and effects of contaminants, and hydrology)
- **RESOURCE CONSERVATION AND RESTORATION PLANNING** (remedial action programs, limiting/eliminating pollution sources, facility siting, watershed management programs, removing pollutants, land use restrictions, open space preservation)
- **PERMITTING** (application preparation, hearing presentations, support documentation, expert testimony)
- **PROJECT IMPLEMENTATION** (feasibility analyses, technical supervision, cost benefit analyses, expert testimony)
- **WATERSHED EVALUATIONS** (point and non-point pollution sources, loading estimates, load reduction mitigation)

ENVIRONMENTAL ASSESSMENT AND COMPLIANCE CAPABILITY

- **21 E ENVIRONMENTAL ASSESSMENTS, PHASE I, II, III** (contaminant potential analysis, file review, on-site inspections, remediation program development, water & soil sampling, report preparation)
- **ASBESTOS AND RADON SURVEYS** (building surveys for asbestos, radon testing, laboratory analysis - PLM, remediation programs)
- **TOXICITY EVALUATIONS** (on-site inspections, toxicity analysis, contaminant evaluation, risk assessment, environmental testing, report preparation)
- **PERMITTING** (regulatory liaison, application preparation)
- **PROJECT IMPLEMENTATION** (project supervision)

COASTAL RESOURCE CAPABILITY

- **RESOURCE IDENTIFICATION** (marine habitat identification, species identification, coastal wetland mapping, population studies, coastal wetland identification)
- **RESOURCE EVALUATION** (shellfish/fisheries inventory, fish and marine mammal tracking, habitat evaluation, benthic community analysis, impact assessment, data collection, sampling design, primary productivity, nutrient dynamics, phytoplankton and zooplankton analysis, data analysis, data quality assurance auditing)
- **PROJECT PLANNING** (performance standards, best management plans, mitigation, trade-off analysis, resource development)
- **PERMITTING** (application preparation, hearing presentations, environmental assessment reports, expert testimony)
- **PROJECT IMPLEMENTATION** (habitat replacement, habitat restoration, habitat management)

FISHERIES AND WILDLIFE CAPABILITY

- **RESOURCE IDENTIFICATION** (cover type classification, cover type mapping, aquatic habitat identification, habitat interspersions, species lists, population studies, endangered species)
- **RESOURCE EVALUATION** (species life requisites, resource availability, sampling protocol, data collection, terrestrial habitat evaluation, aquatic habitat evaluation, computer modeling, habitat evaluation procedures, impact assessment, stress analysis)
- **PROJECT PLANNING** (best management plans, trade-off analysis, mitigation, compensation, habitat improvement, resource development)
- **PERMITTING** (environmental assessment reports, application preparation, hearing presentations, expert testimony)
- **PROJECT IMPLEMENTATION** (terrestrial habitat management, habitat alteration, aquatic habitat management, habitat replacement)

VEGETATION CAPABILITY

- **RESOURCE IDENTIFICATION** (vegetation classification, vegetation mapping, vegetation structure, species composition, density and coverage, endangered species)
- **RESOURCE EVALUATION** (stand evaluation, vegetation dynamics, fertility, productivity, sampling protocol, data collection)
- **PROJECT PLANNING** (best management plans, trade-off analysis, mitigation, compensation, planting programs, buffer zones)
- **PERMITTING** (environmental assessment reports, application preparation, hearing presentations, expert testimony)
- **PROJECT IMPLEMENTATION** (vegetation management, revegetation, vegetation enhancement, community substitution)

SOILS CAPABILITY

- **RESOURCE IDENTIFICATION** (classification, mapping, hydric soil delineation)
- **RESOURCE EVALUATION** (test pits; percolation tests, septic system suitability, development suitability, soil use capabilities, soil use limitations, fertility analysis, sedimentation/erosion risk assessment)
- **PROJECT PLANNING** (erosion and sedimentation control, facility siting, prime agricultural land mitigation)
- **PERMITTING** (impact analysis, report preparation, hearing presentation, expert testimony)
- **PROJECT IMPLEMENTATION** (erosion and sedimentation control, construction monitoring, construction report preparation, quality assurance)

GEOLOGICAL CAPABILITY

- **SURFICIAL GEOLOGY INVESTIGATION**
(classification, mapping, glacial features, sedimentary features, seismic studies, test boring, stratigraphy, geomorphology)
- **BEDROCK GEOLOGY INVESTIGATIONS**
(classification, mapping, fracture analysis, seismic studies, depth evaluations, weathering characteristics)
- **PROJECT PLANNING** (excavation requirements, facility siting, test pit logs, boring logs)
- **PERMITTING** (impact analysis, report preparation, hearing presentations, expert testimony)
- **PROJECT IMPLEMENTATION** (erosion and sedimentation control, resource protection, monitoring)

GROUND WATER IMPACT ASSESSMENT CAPABILITY

- **RESOURCE EVALUATION** (hydraulic conductivity, flow directions, high water table estimates, flow velocities, ground water mapping, water quality)
- **RESOURCE MONITORING** (water level measurements, water quality monitoring, well installation, water sampling)
- **RESOURCE MODELING** (analytical and/or numerical plume modeling, analytical and/or numerical drawdown modeling, mounding analysis, fate and effects of contaminants)
- **PROJECT PLANNING** (pollutant containment, pollutant removal, dewatering)
- **PERMITTING** (impact analysis, report preparation, hearing presentations, expert testimony)
- **PROJECT IMPLEMENTATION** (cost analyses, feasibility analyses, technical supervision, quality control)

AQUIFER INVESTIGATION CAPABILITY

- **RESOURCE IDENTIFICATION** (aquifer mapping, recharge zone mapping, fracture trace analysis, seismic evaluation)
- **RESOURCE EVALUATION** (aquifer yield, permeability testing, contamination studies, safe yield analysis, pumping tests, aquifer thickness determinations, cone of depression geometry, numerical modeling)
- **PROJECT PLANNING** (well siting studies, aquifer protection, recharge analysis, water consumption projections)
- **PERMITTING** (permit application preparation, documentation, verbal presentations)
- **PROJECT IMPLEMENTATION** (well installation, drawdown testing)

STORM WATER MANAGEMENT CAPABILITY

- **SITE INVESTIGATION** (baseline hydrologic conditions, existing water quality, stormwater system identification, post-development runoff, post-development water quality projections, water sampling, computer modeling)
- **PROJECT PLANNING** (best management plans, peak discharge control, volume control, ground water recharge, erosion control, pollutant control, low flow maintenance, environmental amenities)
- **PERMITTING** (impact analysis report preparation, hearing presentations, expert testimony)
- **PROJECT IMPLEMENTATION** (feasibility analyses, cost/benefit analyses, quality control, technical supervision, operation and maintenance plans, monitoring programs)

NPDES STORM WATER MANAGEMENT CAPABILITIES

- **NATIONAL POLLUTANT DISCHARGE
ELIMINATION SYSTEM STORM WATER
DISCHARGE PERMIT EVALUATION** (general or
individual permit status, compliance requirements, EPA liaison)
- **POLLUTION PREVENTION PLANS AND BEST
MANAGEMENT PRACTICES** (site specific plans, storm
water management, erosion and sediment control measures,
stormwater system identification, compliance specifications)
- **PERMITTING** (permit applications, certification preparations,
notifications)
- **PROJECT IMPLEMENTATION** (pollution prevention
plan implementation, site inspections, reporting, plan updates)